Chapter 3 – Participatory sustainability and power

What kind of power do we need?

What kinds of power shall we use and how shall we use our power best for sustainability?

In this chapter we explore how participatory power arises out of and can address issues related to our participation in the larger systems of life on earth. We consider some fundamental principles of participatory power and of the nature of the needed transition from our current power regime to a more participatory one that can serve sustainability.

Every day the complexity of human and natural systems grows less responsive to top-down management and control. Accelerating change exacerbates that challenge, exceeding the capacities of society's centralized learning and response mechanisms.

Human civilization needs innovative and responsive capabilities that can address diverse interrelated phenomena that adversely affect the health and sustainability of living systems. Furthermore, we need to develop those collective capacities in a time of increasing resource scarcity.

These requirements argue for a participatory approach. To handle sustainability challenges with less dependence on our usual top-down, linear, centralized approaches, we need many agents of sustainability acting responsibly and responsively everywhere at once. We need to increase the participation of diverse sectors and people bringing their whole selves and diverse capacities and resources into play in collaboration with each other and in alignment with the intrinsic qualities of living systems, both human and natural, at all scales. We need them engaged up front in clarifying and creating the shared understandings, visions, and paths to be taken en route to greater sustainability, and we need them engaged every step of the way on those paths.

So what *kinds* of power shall we use to achieve this, and *how* shall we use that power best for sustainability? How can we promote sustainability with "participatory power?

Forms of power

All living systems – including individual people, human groups, and human communities – have agency. In its most basic form, power is agency, i.e., the capacity to act, to do, to generate effects – what some people call "power to". This basic form of power can be increased or decreased, and can be used towards different ends. In a civilization governed by participatory power for sustainability, individuals would act to increase the power of their groups or organizations, and these collectives would act to increase the power of their individual members. The resultant synergistic power would be channeled toward sustainable ends.

This channeling of power would include freeing people from factors that interfere with their efforts to promote sustainability, such as laws that impede sharing and zoning regulations that impede domestic food production. It would also include nurturing opportunities and capacities that encourage and enable such efforts, such as supporting grassroots networking and experiments in local green economics. Such liberation and empowerment would necessarily include everyone, but would particularly ensure that a more equitable distribution of power serves the liberation and empowerment of previously marginalized and oppressed people.

There are many ways to manifest agency or power-to. Four forms are explored below: *power-over*, *power-with*, *power-from-among*, and *power-from-within*.

"Power-over" and its alternatives

Most people associate the word "power" with **power-over** – a linear kind of power[9] through which we manipulate people and resources and overcome resistance and obstacles to get what we want. In its benign or neutral forms, power-over manifests as influence and management, while in its more rigorous forms it manifests as control and exploitation, or even domination and destruction.

The one-way, direct-fulfillment nature of power-over lends itself to selfishness, arrogance and corruption. While a necessary part of life, its potential dark side needs to be checked with various moral and cultural constraints, countervailing forces, and systems of accountability. It needs to be impeded from undue concentration and from subverting the health and sustainability of human and natural systems. Even when used in healthy ways, power-over tends toward unsustainability since it naturally limits broad, equitable participation and usually demands considerable energy and resources to manage resistance, promote compliance, and otherwise control the world around it.

More holistic[10], participatory forms of power stand in contrast to power-over. They offer greater scope in that they more readily cover more territory, more dimensions, more sectors, more situations,

etc. They better serve sustainability by aligning us with the intrinsic and complementary needs of people and nature, and they demand fewer managerial resources because they evoke self-organization.

These forms include what we call power-with, power-from-within, and power-from-among. They differ from power-over in that they require us to pursue our desires in concert with entities and energies other than and larger than our selfish, shallow, egotistical selves. Taken seriously, these participatory forms of power help us fulfill our needs and aspirations within a dynamic that also fulfills the needs and aspirations of the lives around us. With such means we can tap greater resources and self-organizing energies than we can by using force and manipulation. Because it involves human and natural forces in satisfying human and natural needs and thus evokes less resistance and unwanted side-effects, this participatory approach is more consistent with sustainability than the power-over approach of simply getting what we want regardless of the other lives involved. However, there are potential synergies, as we shall see.

Power-with is the power of collaboration, cooperation, alliance, coordination, and mutual support. It involves aligning the resources and capacities of diverse entities – people, interests, perspectives, groups, organisms, etc. – for the collective goal of satisfying the individual and collective needs and aspirations of those entities. Among people and groups, the use of power-with involves the capacity to find common ground and to use differences and even disturbances creatively to generate new shared understandings and possibilities. It therefore benefits from an inclusive bias and from the ability to integrate diverse gifts and to resolve or creatively channel the energies of dissent and conflict. Since different needs and perspectives so often generate disruption in groups, organizations, and societies – and thereby produce *social* unsustainability – we serve sustainability when we develop and exercise the inclusive bias and integrative skills that characterize power-with.

Power-with is the heart of participatory sustainability. It enhances our capacity to handle complexity and scope through massive information gathering and knowledge sharing, distributed parallel processing, and "many hands make light work" dynamics. In addition, when power-with is applied to working *with* natural dynamics rather than dominating them – as we see in renewable energy, recycling, and organic agriculture – we find less waste and damage generated and less input ultimately required because the life forces of nature are supporting rather than impeding our efforts.

Power-with manifests in many ways – as a participatory worldview, as a cooperative attitude, in collaborative activity, and in nature- and people-friendly technologies, as well as in the design of buildings, landscapes, communities, group processes, social interactions, and political, governmental, and economic institutions that encourage its exercise. We see power-with wherever the resources of the many are being brought together by the many in the service of the many.

In this last sentence we see the potential for integrating power-with and power-over. The dynamics of consent, delegation, and answerability allow a group to distribute its power-over among its members to serve their shared ends. This is the fundamental principle underlying advanced forms of democratic organizational power where, in a context of shared purpose and more or less explicit responsibility to the whole, individuals and subgroups can perform tasks without micro-management

or even with full self-organization – especially where their capacities or passions make them particularly qualified to provide certain services to or on behalf of the whole group. The strongly shared purpose and a certain level of consultative interaction keep the whole group's activities aligned. This is the principle underlying such intriguing innovations as sociocracy[11] and teal organizations[12] which empower members while minimizing the risks of power concentration, resistance, and chaos.

Power-with can show up with two notable shadow sides: mob behavior and collaboration with harmful power-over dynamics. Mob behavior is power-with without collective intelligence and wisdom, power that is ineffective and/or destructive. Power-with transcends mob behavior to the extent it consciously helps the whole (group, community, society) serve the whole (group, community, society). It addresses the needs and interests of the whole using the gifts and resources of the whole, guided by the information, knowledge, perspectives and wisdom of the whole, such that the outcomes – the benefits and costs – are shared by the whole, from which the whole can then learn and evolve.

The other shadow of power-with is collaboration with the power-over forces that oppress us and harm our shared world. Power-over always requires some form of cooperation and compliance. Some cooperation-with-oppression derives from systems of privilege that allow some people to insulate themselves from the system's most obvious harms. Participants in such privileged alliances with harmful power need to wake up to that reality – with or without pressure or help from others – and to redirect their privilege to transforming the harmful system.

More remarkably and ironically, cooperation with an oppressive power-over system also comes from its victims. Gandhi (who, as a lawyer trained by the empire that ruled his country, exemplified the redirection of privilege mentioned in the previous paragraph) and other transformational leaders have long recognized that freedom from systems of domination requires the victims of those systems to realize – and cease – their collaboration with those systems and to invest their usually substantial but previously unrealized power-with to change those systems. Such redirection of power-with requires taking responsibility for one's participation. To some degree, this in turn requires shifting from blame to personal and group empowerment and action. If done thoroughly, the result is renewed agency in service to the well-being of the whole – a fundamental principle of nonviolent action.

Power-from-among is the extra capacity that arises from the relationships between entities – their interdependencies, their interactions, their mutual stimulations, their networked structures, their peer-to-peer connectivity, and the co-created resources and resource flows that manifest in their midst. Because of its intrinsic interactivity – and thus participatory nature – power-from-among is a major factor in the capacity of a system to self-organize. It also is a major factor in emergence, i.e., the appearance of new capacities or characteristics in a human or natural system that are significantly different from and often greater than those of the components or members of the system, even taken collectively. Power-from-among is the power of dynamic synergy.

Power-from-among is a guiding principle in participatory design and an emergent phenomenon in collective activity. We see it in productive group processes and crowdsourcing initiatives. We see it in ecosystems, like the purification of water through chemical and biological interactions in a wetland,

and in practices like permaculture[13] that apply natural patterns of relationship in the design of horticultural and residential sites. We see it in brainstorming sessions, jazz ensembles, sports teams, and other group improvisational activities that are "in the groove" or in "flow"[14]. We see it in the mutual stimulation of Open Space[15] conferences, World Café[16] conversations, and the global interactivity of scientists. Even the presumed social benefit of the self-interest-based "free market" is a product of power-from-among, although its self-organizing power is benign only to the extent that social and environmental costs are internalized into the prices of the resources extracted and the goods exchanged.[17]

Both power-from-among and power-with – and even power-over – also tap the final source of power we'll discuss here: **power-from-within**.

Every living entity and system has natural tendencies and motivating dynamics like needs, urges, and aspirations that give their aliveness an intrinsic directionality and energy. This vector can be recognized, understood and mobilized as a resource. It is often best empowered by appreciation, recognizing and validating the positive essence and aliveness in someone or something.

When tapped as a collaborative resource (power-with) – as in the co-creation of an inspiring shared vision or purpose – power-from-within brings energy to the fulfillment of shared aspirations and needs. When tapped as a resource for power-over – as in scientific public relations, advertising, and demagoguery that evoke targeted responses from targeted people – it supports elite (not necessarily bad) goals through political and economic manipulation. Both of these can be used to generate participation in sustainable behaviors and activities, albeit with the caveats offered earlier regarding the shadow sides of power-over and power-with.

An additional aspect of power-from-within that relates to sustainability involves spirit and wholeness. Many of us have met people who have palpable qualities of presence and integrity, or who are guided by internal callings that give them unusual energy and persistence. We also know that dignity, a sense of self-worth, and a certain amount of confidence and knowledge are significant factors in a person's ability to play a powerful role in communal action. All these are manifestations of power-from-within. Furthermore, we see all around us a rising spiritually-motivated movement to respect and protect the Earth as sacred, a movement ranging from pagans to eco-Buddhists to "creation care" fundamentalist Christians. The courage exhibited by many of these people to risk their lives and freedom to defend the Earth is rooted in a power greater than themselves which arises within their own spirit to shape their behavior, as we also saw in the mass movements around Gandhi and Martin Luther King, Jr. All these are clearly potent aspects of and resources for participatory sustainability.

Foundations of participatory power for sustainability

At least the following four principles must underlie any vision of a sustainable culture based on broad participation: peerness, diversity, interaction and the commons. These naturally mirror some of the dynamics noted in the previous chapter, viewed newly through the lens of power.

Peerness includes both power equity and freedom of association. Our peers are those of equal standing with whom we chose to associate because of some likeness to ourselves. In a sustainable participatory culture, those with whom we associate may not be equal to us in reputation, capability, or other characteristics, but they do not have power-over us. In public forums or organizational forums, even those with official status are fundamentally viewed as peers in the conversation. But a key factor of peerness is its powerful role in self-organizing dynamics: I voluntarily – even eagerly – connect with others who share my views, my needs, my concerns, my culture, my visions, etc., because I want to, and we pursue those together voluntarily as equals, modified by our earned reputations for integrity, fairness, expertise, capability, etc.

This principle provides the motivation for participation while removing some of the key impediments. It is the basis for the rapidly expanding participatory sphere of peer-to-peer (p2p) cyber-dynamics which are spreading into the culture at large, including the realms of education, economics, politics, governance, health care and more. The equity aspect of peerness is also vital to sustainability because those with undue wealth, power, and privilege have both greater impact on the world and a greater ability to insulate themselves from negative impacts, thus breaking the balancing feedback loop of experience.[18] To the extent people are peers they share both creative responsibility for action and being affected by the outcomes of what they do, which creates a tight feedback loop for collective learning and thus sustainability.

Diversity includes all forms of diversity, both the varieties associated with oppression and liberation (race, gender, class, age, ability, sexual orientation, etc.) and those naturally occurring in and among all those populations (experience, perspective, knowledge, cognitive style, personality, interests, talents, feelings, opinions, needs, values, dreams, etc.). Diversity embodies the many facets of wholeness which, when brought together creatively, generate fuller understandings, realities, capacities and possibilities. In specific instances, we are challenged to focus on and gather that specific diversity most relevant to the situation with which we are engaging – plus a bit more for creative stimulation. Finally, of course, biodiversity is fundamental to sustainability, and having diverse people or groups available to handle situations contributes to community resilience. Preserving, supporting and engaging the full diversity of humanity and nature is vital to adequately address the full complexity of sustainability issues.

Interaction includes all forms of dynamic relationship – conversation, exchange, gifting, stimulation, competition, cooperation, interdependence, reputation, all of it. Through well designed peer

interactions, the diversity noted above generates not only meaning, abundance, enjoyment and quality of life in general, but evolution, energy, and wisdom. This is the dynamic through which participatory power is realized.

Interaction is happening all the time, no matter what. But the quality of interaction makes a tremendous difference in how well the interaction serves life and sustainability. Much depends on the natural patterns of interaction we attend to and apply and the new patterns of interaction we create and use in building – and evoking – more sustainable communities, cultures, economies and politics. Designs that promote interactions that are productive for those involved and for the larger living systems they are part of make collectively self-organized sustainability possible.

The concept of **the commons** includes all that we share. Commons provide contexts and playing fields within which participatory power functions and where much of the fruits of participatory power are held for common benefit today and for the future.[19] Most understandings of the commons include cultural/social commons and natural commons. Some frameworks also include shared benefits and harms, especially those resulting from our collective action.

In all sustainability efforts, caring for the natural commons is, of course, primary. But that involves participation, including co-creating, caring for, and using many cultural commons such as:

- knowledge
- political culture
- democratic skills and freedoms
- community support systems
- nature-honoring traditions
- social capital
- language and other symbols
- arts and performance
- public- and user-owned and managed economic institutions
- sustainable technologies
- public spaces
- public conversations

- our shared ability to see what's going on ("holopticism"[20]), and more.

Much of what's needed for sustainability is being privatized or considered intellectual property and excluded from the commons. We need to defend what's already part of our commons, honor and support innovators who contribute their innovations to the commons, and establish institutions that make serving the commons a cultural norm (such as creative commons licensing[21]).

The kind of power we need is power that facilitates, nurtures, optimizes, arises out of and embodies these foundations of a revitalized participatory civilization.

Moving from power-over to holistic, participatory power

Power-over arises from assumptions that we are separate from each other and the world and therefore can exert one-way influence without undue consequence. While we need to have this kind of power available, it is potentially the most dangerous form of power on which to build a civilization. This assumption of separateness is proving itself increasingly unviable as the intrinsic wholeness, interconnectivity and participatory nature of reality responds to our linear efforts with the expensive resistance, persistence and unwanted "side effects" that characterize so-called "wicked problems"[22] and our emerging 21st century mega-crises.

The most participatory forms of power – power-with and power-from-among – arise from assumptions that we are connected to each other and to the world, an assumption whose truth is proving more fundamental every day. It is the truth that underlies sustainability because it underlies reality, and sustainability is basically about aligning our understandings, behaviors and systems with the actual contexts in which we find ourselves.

So the wholeness of the world ultimately defeats efforts to affect it without oneself being affected. However, it is a mark of human brilliance – if not wisdom – that we can to such a great extent pursue one-way impact for such long periods, holding off the karmic backlash with our problem-solving skills and reality-manipulating technologies. But that is ultimately a delaying tactic because, as the saying goes, "*Reality bats last*".

Our efforts on behalf of sustainability are basically efforts to step back from primary dependence on power-over into the more holistic modes of power-with and power-from-among, augmented by the "free" resource of power-from-within. The logic of sustainability is participatory logic. This author sees three tracks upon which we can envision its re-emergence:

1. Intelligently designing and instituting increasingly participatory forms of human engagement – especially political and economic – both locally and mediated by the Internet.
2. Reducing obstacles to the natural emergence of broader participation as the institutions of concentrated power-over are progressively humbled and undermined by the twin challenges of emerging mega-crises and the Internet (especially its emerging peer-to-peer economy and its overthrow of traditional gatekeepers).
3. Knowing that the full collapse of civilization's control systems will generate tremendous trauma and destruction, out of which more primitive forms of both power-over and power-with will arise spontaneously in humanity's efforts to cope.

There is little we can do about the last track; it will happen to the extent we fail to energetically pursue the first two tracks, to which we now turn, addressing the second first.

Reducing obstacles to the emergence of participatory power

For several centuries humanity's power-over capacities have been crowding out or co-opting more holistic forms of power. Our ability to control, predict, and exploit has been expanding at an accelerating rate, facilitated by cheap energy, rapidly developing science and technology, and the increasing globalization and monetization of economic activity. These linear sources of power, which help us directly cause whatever we want to have happen, are currently used by economic elites and their political, media and scientific allies to minimize corrective feedback dynamics that could ameliorate the dangerous impacts of their exercise of concentrated power-over.

A primary medium through which this is accomplished is money. Money underlies our focus on the dangerously reductionist primary economic indicator of Gross Domestic Product. Money underlies the systemic corruption of politics and elections, as well as the distortions of science and education. Money underlies the myopic systemic obsession with quarterly corporate profits. Money underlies the disastrous exploitation of natural resources as well as the destruction and pollution of ecosystems and organisms – now most notably the disruption of our global climate.

Money itself is not the problem. The problem is (a) the reductionist quality of money – its colonization of value to the detriment of all non-monetized activity; (b) the concentration of financial wealth and power; and (c) the use of money to disable feedback dynamics that can moderate its destructive aspects. The solution to money, therefore, must include the re-validation of other forms of value, the reduction of extremes in wealth inequality, and the re-establishment and strengthening of the sabotaged political and economic feedback loops. This would involve (but not be limited to) such initiatives as:

- balancing GDP with alternative economic indicators like the Genuine Progress Indicator[23] and Gross Domestic Happiness[24];
- limiting political campaign contributions or publicly funding those campaigns;
- strengthening government and corporate transparency and the revelatory social role of whistleblowers and investigative journalists;
- promoting explicit "triple bottom line" and "public benefit" corporate forms that account for environmental and social impacts as well as financial factors;
- establishing the rights of citizens and communities in the face of corporate efforts to overwhelm or bypass those rights using the legal system and their alleged "personhood";

- internalizing the costs of environmental pollution and damage with pollution taxes, regulations, carbon markets, etc., and eliminating subsidies for destructive economic activities and technologies.

We start with these because each one helps reduce the colonization of public space by economic powers, opening it up to greater participation by other players. For example:

- Making GDP a subsidiary statistic facilitates public policy support for non-monetary economic activity like gifting, sharing, mutual support, self-reliance, volunteerism, community engagement, etc. Furthermore, support for "genuine progress" and "domestic happiness" draws people into participation in nature, community, and the co-creation of healthier, more sustainable lifestyles, which would raise those statistics. This transition could be expedited with universal basic income programs[25] which ease the lifestyle constraints of employment, freeing people to experiment with other ways of living and to contribute more to their communities and to needed social transformation.
- Limiting the power of big money in politics reduces public cynicism and makes it attractive for more people and groups to get involved in political activity because their efforts are not so readily countered by special interests.
- Making corporate and government activities more transparent draws people into efforts to raise the quality of those activities so they better serve human and natural welfare. When people know what's going on, half the battle is won.
- Chartering corporate social and environmental responsibility makes corporations into – and frees them to be – active contributors to the well-being of society and natural systems and strengthens their support for engaging others in efforts that serve that collective well-being.
- Limiting the legal power of self-interested corporations frees citizens and communities to pursue their self-reliance and sustainability without legal attacks and constraints from corporations.
- Internalizing the costs of social and environmental damage into the prices of harmful products channels the natural self-interest of economic players – consumers and corporations – into serving the well-being of the whole, simply through their search for the "best bargain." This uses market forces to make practically everyone into a participant in sustainability.

Tools for challenging and transforming power-over

Change agents have a long history of challenging oppressive power. They have developed many tools to enable people to understand, resist, redirect, and transform that power. These tools are potent resources for participatory social change. Below I briefly describe two of the most insightful of these

tools, the Power Cube and the Movement Action Plan.

The Power Cube[26]

The Power Cube integrates many approaches to power analysis and popular empowerment. It includes three dimensions: forms of power visibility, spaces for the exercise of power, and places (levels or scales) at which power plays out.

The forms of power visibility are *visible*, *hidden* and *invisible*. *Visible power* involves the explicit and recognized channels for exercising power and influencing decisions, e.g., media, political campaigns, government, police, demonstrations, strikes, etc. *Hidden power* involves what happens behind the scenes – usually with intent to exclude certain voices, topics, or information – manifested, for example, by elite deal making, pressuring and lobbying activities; rules, procedures, threats, issue framings, and logistical challenges that impede or devalue the participation of certain people or kinds of participation; and even covert grassroots organizing, resistance, and hacking. *Invisible power* involves systemic, cultural, social and psychological sources of power and powerlessness, such as internalized oppression or privilege, cultural narratives and stereotypes, knowledge or lack of it, the stories we tell ourselves and each other, our ideologies and values, our needs and aspirations, etc. In a particular situation, issue or community, we can analyze the way these forms of power play out in the existing power dynamics and then develop strategies within each realm to overcome powerlessness and enhance popular power.

The *spaces* (forums, channels and opportunities) for exercising power include *closed spaces*, *invited spaces*, and *claimed* or *created spaces*. *Closed spaces* exist where power is exercised outside of the view of the public and relevant (usually marginalized) stakeholders. Closed spaces get opened up with demands for greater transparency, access to information, public accountability, and a place at the table where decisions are made. *Invited spaces* exist where the public and/or all stakeholders can give input into the decision-making activities of official powerholders. People and groups can exercise power in invited spaces by learning to use the forum's procedures, becoming knowledgeable about the issues under discussion, and becoming skilled at public speaking and negotiation. *Claimed spaces* are forums created by the people and popular organizations outside of official channels, for their own use, to hold their own conversations and deliberations, to organize their own activities and resistance, and to pursue their shared interests, needs, and aspirations. Whoever creates or manages the space tends to have the defining power within that space.

The *places* (levels or scales) at which power plays out include *local* (including individual), *national* and *global*. These levels can and do influence each other, and movements, corporations and governments play roles in all the levels. These dynamics can be analyzed and addressed using the "forms" and "spaces" of power described above. Strategists differ on which levels provide the highest leverage for

change and empowerment.

A major point of the Power Cube is to help change agents think in terms of all the factors that sustain status quo power arrangements and then design coordinated ensembles of strategies to cover most or all of the factors clarified by the cube, so that dysfunctional power relations can be transformed into new collective capacity to further the common good.

The Movement Action Plan27

The Movement Action Plan (MAP) is a strategic framework for understanding the stages through which a nonviolent grassroots movement has its impact. It envisions movement success as mainstream awareness of movement-promoted issues and mainstream adoption of movement-influenced ideas, policies, programs and institutions. It articulates the strategic interactions between social change movements, society's dominant powerholders, and the public. It serves as an excellent complement to Harvard historian Gene Sharp's research into and guidelines for strategic nonviolence which have influenced many nonviolent revolutions throughout the world.28

The MAP describes eight stages starting with broad public ignorance of an issue over which the powerholders hold near-total power. Activists are ignored or ridiculed as they try to raise public awareness of the problem. That's the *first stage*.

In the *second stage* activists develop their expertise and take their case to every possible official channel, documenting every failure of official institutions to address the problem. Powerholders fight the activists, usually successfully, and manage public awareness which grows only slightly.

In the *third stage* the activists organize and increase the visibility of the issue's victims. A new wave of more radical activists emerges who are frustrated with the failed attempts of more mainstream activist organizations that dominated the second stage. Activists build links to pre-existing networks and non-governmental entities like churches who take on the issue. Powerholders continue to manage public awareness and suppress the issue, but public concern continues to slowly grow, especially through the victims and their sympathizers.

In the *fourth stage* the issue "takes off" with energy generated by a "trigger event" – a major tragedy related to the issue – a nuclear meltdown, a school shooting, a devastating weather event, etc. Public awareness soars and activists stage dramatic, highly visible nonviolent actions to force the issue onto the public agenda, focusing on how relevant powerholders have violated public values through their action and neglect. The powerholders are taken by surprise and attack the movement as radical and irresponsible and try various public relations initiatives and repression to regain control.

In the *fifth stage*, after months or years, the powerholders' persistence pays off. Although the public's awareness does not drop to where it was before the trigger event, their concern becomes confused and dispersed. Activists become discouraged. More people are aware of the scope of the problem, but also of the difficulty of addressing it. Some activists persist in seemingly ineffective protests, while others drop out or become more radical, with violent ones undermining the power of the nonviolent ones. There is much infighting among activists, often seeded by infiltrators sponsored by powerholders. Personal activist support and empowerment efforts are needed to counter discouragement and burnout and to help the movement evolve from narrow issue-protest to long-term social change.

In the *sixth stage* the persistence of long-term activists begins to pay off. They recruit more and more groups and citizens to their cause, often with the help of additional trigger events as well as more sophisticated framing of the issue for diverse audiences. As they achieve majority support, they erode the political, economic and social support the powerholders need to continue their damaging policies. Activists re-engage with mainstream political institutions, in which more politicians are seeing the writing on the wall and being pushed into action by strategically held demonstrations and mass public involvement facilitated by participatory organizational models. As more powerholders realign to the new public consensus and attempt to check their losses through negotiations with less radical activist groups, activists increasingly promote alternative ways to address the issue and even alternative paradigms and social visions.

The *seventh stage* involves the movement's success through a dramatic showdown, a quiet showdown, or attrition. In a dramatic showdown another major trigger event, either emergent or consciously organized, converts a strong majority of the public and political players to the movement's alternatives and radically undermines the legitimacy of other powerholders. In a quiet showdown, most powerholders undertake the needed reforms as if it were their own idea and intentionally sideline the activists. In attrition, the change happens slowly over many years and this also erodes any sense of victory by the activists, despite the actual extent of their successes.

In the *eighth stage*, activists move on to other things. This can happen through discouragement, as some refocus on the non-activist parts of their lives. Others keep up their activism but move on to related or even totally new issues, or into deeper dedication to more fundamental social transformation, perhaps as a result of being "radicalized" by their experience in the previous stages. Some established activist organizations remain behind to make sure the reforms won by the movement are actually implemented and sustained. Some powerholders become active supporters of the new approaches; others drag their feet; still others form a backlash against all such efforts for change. But the public has largely settled into the new perspective.

These two approaches have an activist energy natural to the activist past of this author. There are clearly many other – alternative and complementary – approaches to change available with radically different underlying assumptions and dynamics, e.g., the intriguing concept of Global Action Networks [29]. Thus this section should be taken as a stimulant to more thinking about and sharing of participatory approaches to generating participatory power for sustainability.

Enhancing the emergence of greater participatory power

As the primary obstacles to participation are broken down, the modes, resources and infrastructure for participation can be – and are being – built up.

There are three overarching categories of participation at work here: participation with each other; participation of, by and for whole systems and communities; and participation with nature.

Participation with each other involves various systems for bringing people into creative interaction face-to-face and online. Resources abound for creative dialogue, deliberation, conversation, networking, peer-to-peer learning, collaborative work, decision-making, storytelling, conflict resolution, information gathering and analysis, etc. An alternative economy based on self-reliance, personal/local production (e.g., "the Maker movement"[30], widespread gardening and community supported agriculture, and cultural creativity), gifting, sharing and relationship-based exchanges, crowdfunding, and other co-creative initiatives is already rapidly growing, supported by cooperatives and legal defense[31] and innovation to protect it from outside challenges. Also growing are participatory, crowdsourced "citizen science" research[32]. We can increase participation-support further through innovation and specialist trainings in the realms of programming, group process[33], journalism[34], and law.

All these activities become resources for and aspects of the *participation of whole systems and communities*. At the collective level it becomes more important that forums exist where those talking and working together embody the diversity of the system or community involved. For example, participation in an organization should include people from all levels and departments. Participation in a conflict or issue should include stakeholders from all aspects of the issue or system – a full spectrum of people and groups affected, those with diverse information, those with power to influence outcomes, etc. Problem-solving, visioning, and policy-development conversations on behalf of a community or country would ideally include citizens randomly or scientifically selected to be a microcosm of that polity, as well as engaging anyone else interested through online and face-to-face gatherings before, during and after the microcosm conversations.

People passionate about an issue – passion being a form of power-from-within – can generate action within a community or network using forums like Open Space and Study Circles.[35] Education can become more cooperative, participatory, and based on addressing real world sustainability challenges together. Neighborhoods can be engaged in communal activities of all sorts, e.g., potlucks, cultural

events, asset mapping[36], competitions for lower carbon emissions, mutual gardening support and harvest, local energy generation, and "city repair"[37] reclaiming and conversion of streets and intersections.

Communities can encourage such conversations and activities by creating, promoting and supporting public spaces such as special park facilities, libraries, cafes, community centers and newly accessible venues within existing institutions[38]. More community members can be supported to engage in restorative justice[39], educational and social service activities. In the realm of social action, we can establish more policy development and alliance resources (like the Interactive Voter Choice System[40]) and community initiative development and promotion resources. Communities can use local quality of life indicators to generate competitions among different parts of their community and with neighboring or sister communities. Perhaps most importantly, communities can band together to push for more sustainable policies at higher levels of governance. After all, in an issue like climate change, a community's reduced emissions will have little impact on its own experience of climate disruption compared to seriously implemented international agreements on radically reduced emissions.

All these things enhance our collective ability to *participate with nature* more sustainably. They shift our needs-fulfillment strategies from consumerism to meaningful engagement with each other, to non-material sources of satisfaction, and to the more earth-connected realities of life. Enhancing participation through localization reduces transport energy requirements, grounds us in place, and tightens feedback dynamics so we more directly experience the consequences of our (and each other's) actions. Practicing informed, productive community conversations around public concerns enhances our ability to generate wise solutions that take interconnectedness and nature seriously. As noted above, communities can also join with other communities through conferences and online networks to share experiences and build pressure for national, international, and corporate policies that support sustainability. Biomimicry[41], permaculture, ecology, programs like The Natural Step[42], and the new and ancient forms of spirituality based on ecological and evolutionary[43] understandings offer profound guidance for joining our collective behaviors more harmoniously into the participatory processes of nature.

Guidelines for participating in building participatory power

From the perspective of an individual, there is entirely too much here to do to know where to begin. Here are some guidelines.

- **Passion**. Do whatever you care about that supports sustainability and/or participation. Participate in activities that have heart and meaning for you, that give you joy. Encourage others to do the same. Tap the wellsprings of power-from-within in your own life and spirit.
- **Dialogue**. Start powerful conversations about sustainability and the better lives we could have if we lived well with each other and nature. Ask powerful questions.[44] Get trained as a conversational convener, facilitator, or host and connect up with networks of such practitioners.[45]
- **Innovation**. Create technologies, spaces, trainings, stories, ideas, games, art, and other resources and infrastructure to invite and empower people to participate together in activities that support sustainability.
- **Connection**. Join and promote – or even build – networks, alliances, communities of practice [46], co-ops and other participatory collaborations that further sustainability.
- **Systemic Leverage**. Do what you can to bring more participatory power to politics, governance, economics, and education in ways that serve sustainability. These fields powerfully shape the structure and operation of society. (Two other major fields of leverage – creative and performing arts and information systems – are already highly participatory.) Promote new visions and forms, do local experiments, and get them established and institutionalized, or support people and groups who do these things.
- **Spirit**. Participate in spiritual practices and communities that reconnect you to the earth and life as sacred and which also empower you to participate more actively in protecting nature and promoting sustainability. Examples include Joanna Macy's Work that Reconnects[47], the Pachamama Alliance[48], Earth Activist Training[49], Caroline Fairless' Restoring the Waters[50], and the Evangelical Environmental Network[51].

Conclusion

Participatory power is intrinsic to the achievement and maintenance of sustainability in both human affairs and natural systems. We can and must move from a primary focus on domination, management and exploitation to forms of power that tap our potential for partnership, co-creativity, self-organization, collective wisdom, integrity and spirit. This will require efforts to address both the significant obstacles presented by our civilization's dominant power dynamics and the rapidly rising possibilities for entirely new forms of economics, politics, and human agency made possible by the Internet and the development of new forms of sustainable and collaborative technologies. If we move soon with wisdom and determination, the dominant powers that threaten the well-being of Life today will be no match for the power we can generate together, on behalf of – and informed, inspired and

empowered by – the earth and future generations.